

BookletChart™

Redridge to Saxon Harbor

NOAA Chart 14965

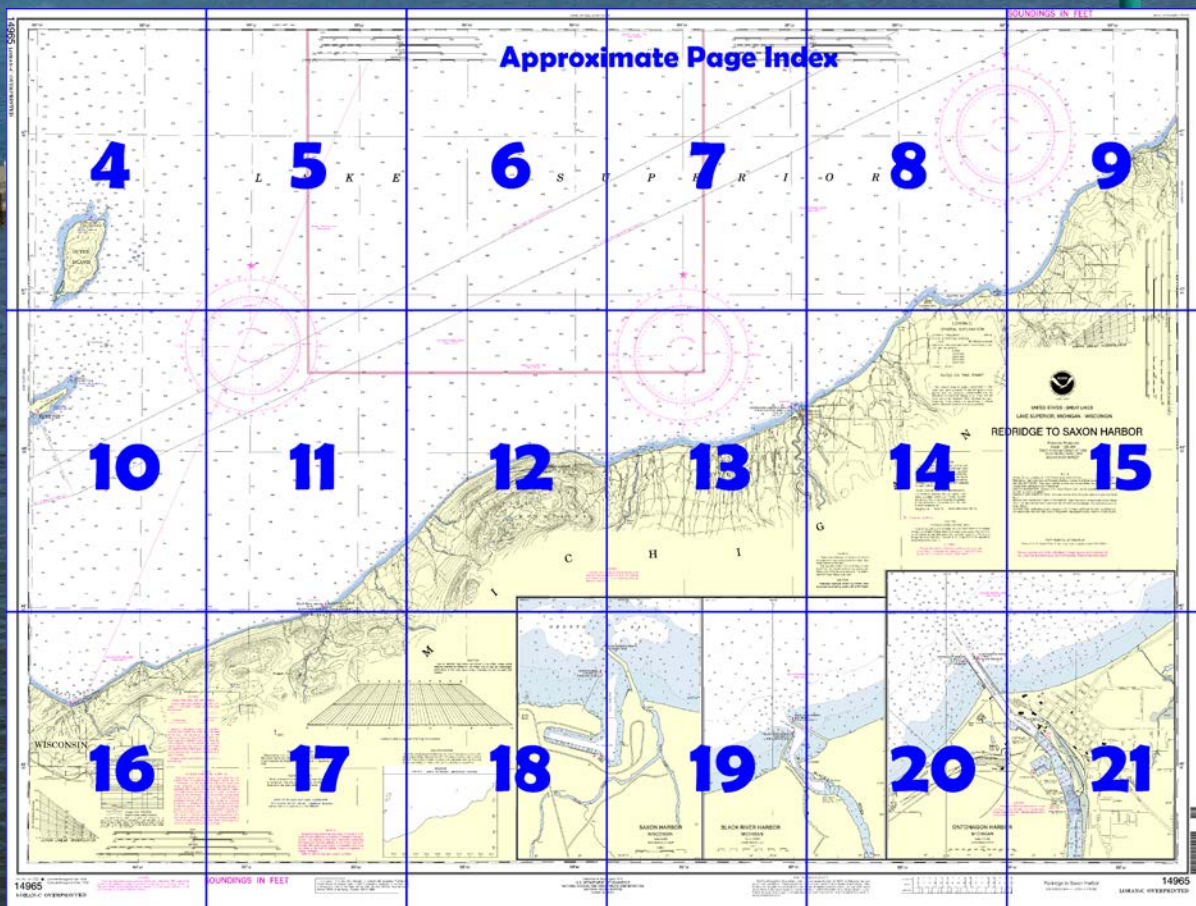


A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=14965>.



(Selected Excerpts from Coast Pilot)

From the Keweenaw Waterway entrance, the shore trends southwest for about 41 miles to Ontonagon Harbor. None of the rivers that flow into the lake in this stretch are navigable, nor are there any docking facilities. Prominent are stacks at **Redridge** and **Freda**, 8.5 and 11 miles southwest of the waterway, respectively. **Misery Bay**, 13 miles southwest of Freda, and **Sleeping Bay**, just west of Misery Bay, offer limited protection. **Fourteen Mile**

Point (46°59.7'N., 89°07.7'W.), on the west side of Sleeping Bay, is marked by a prominent abandoned lighthouse.

Ontonagon Harbor, serving the town of **Ontonagon, MI**, is at the mouth

of **Ontonagon River**. It is the only harbor of refuge along the 79-mile stretch from the Keweenaw Waterway to Black River Harbor. The harbor is used extensively by commercial fishermen. Coal is received at a wharf on the west side of the river just above the mouth. A hospital is in the town. Prominent are a blue tank, stacks, and buildings at the paper company on the west side of the river mouth and a blue water tank about 1 mile southeast of the river mouth.

Channels.—A dredged entrance channel leads from deep water in Lake Superior between the parallel piers to the mouth of Ontonagon River, thence upstream for about 0.4 mile to the head of the project. The outer ends of the piers are marked by lights; a seasonal sound signal is at the west pierhead light. In 2011, the controlling depth was 19 feet in the dredged channel with lesser depths to 17 feet along the edges. Shoaling in the harbor occurs annually during the winter.

Bridges.—A railroad bridge, in about 46°52'03"N., 89°19'03"W., has a fixed span with a clearance of 8 feet. The SR64 highway bridge, about 200 feet above the railroad bridge, has three fixed spans with a least reported clearance of 33 feet.

Small-craft facilities.—A public docking facility developed by the Michigan State Waterways Commission is in a basin on the west side of the river, 0.2 mile above the head of the dredged channel. In 1978, it was reported that local interests annually dredge the entrance and basin to a depth of 7 feet. Transient berths, gasoline, water, electricity, sewage pump-out, launching ramp, and harbormaster services. The harbormaster monitors VHF-FM channels 16 and 9. A 30-ton hoist is available.

From Ontonagon, the shore extends southwest for about 6 miles to the village of **Green**, thence W for about 15 miles, and thence southwest for 18 miles to Black River Harbor. For 15 miles W from Ontonagon, the shore is low, and shoals extend 0.7 mile off.

Silver City, MI, is a village at the mouth of **Big Iron River**, 12 miles west-southwest of Ontonagon. In 1978, the reported controlling depth through the river mouth was 2 feet. The river should not be attempted without local knowledge. Prominent are a 500-foot stack, upper third black, on higher ground 4.5 miles south of Silver City and a television mast 6 miles west of the village. **Union Bay**, just west of Silver City, affords limited protection.

Porcupine Mountains rise about 2 miles west of Silver City and extend 15 miles southwest with some elevations 1,200 feet above the lake. The shoal border in the vicinity of the mountains is narrow, thence at the southwest end of the mountains, the shoal border widens to 0.5 mile southwest to Black River Harbor. A 20-foot-high rock is close offshore 14 miles northeast of Black River Harbor. None of the rivers that flow into this reach are navigable.

Time.—Lakeshore areas of the United States west of 89°50.7'W., which is about midway between Silver City and Black River Harbor on Lake Superior, observe central standard time or central daylight saving time. Areas east of this meridian, including the lakeshore areas of the Canadian Province of Ontario, observe eastern standard time or eastern daylight saving time.

Channels.—A dredged entrance channel leads from deep water in Lake Superior between converging breakwaters and upstream in the river to a harbor basin. The outer ends of the breakwaters are marked by lights, and the east side of the channel inside the breakwaters is marked by a buoy. (See Notice to Mariners and the latest edition of the chart for controlling depths.)

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Cleveland

Commander
9th CG District
Cleveland, OH


(216) 902-6117

Table of Selected Chart Notes

Scale 1:5,000
SOUNDINGS IN FEET

Scale 1:2,500
SOUNDINGS IN FEET

Scale 1:10,000
SOUNDINGS IN FEET

 Pump-out facilities

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

NOTE B

Mariners should use caution as military craft may be operating within the area. For further information consult the U.S. Coast Guard Local Notice to Mariners.

Polyconic Projection
Scale 1:120,000

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.198" southward and 0.583" westward to agree with this chart.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Houghton, MI WXK-73 162.400 MHz (WX-2)

NOTE Z

NO-DISCHARGE ZONE, 40 CFR 140

Michigan waters of Lakes Michigan, Huron, Superior, Erie and St. Clair, all waterways connected thereto, and all inland lakes are designated as a No-Discharge Zone (NDZ). Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) are completely prohibited from discharging any sewage, treated or untreated, into the waters. Commercial vessel sewage shall include graywater. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, or docked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning the regulations and requirements may be obtained from the Environmental Protection Agency (EPA) web site: http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio or at the Office of the District Engineer, Corps of Engineers in Detroit, Michigan.

Refer to charted regulation section numbers.

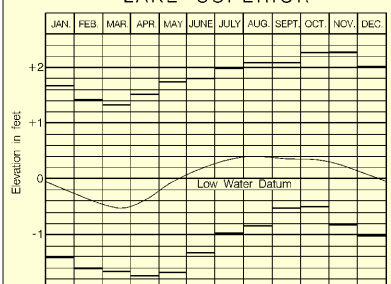
APOSTLE ISLANDS NATIONAL LAKESHORE

The Apostle Islands National Lakeshore boundary extends from the shoreline to ¼ mile offshore.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

LAKE SUPERIOR



Average levels (2001-2010)
Extreme Levels (period of record)
Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

Sailing courses and limits indicated in magenta are recommended by the Lake Carriers Association and the Canadian Shipowners Association.

CAUTION

POTABLE WATER INTAKE

Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

CAUTION

Due to periodic high water conditions in the Great Lakes, some features charted as visible at Low Water Datum may be submerged, particularly in the near shore areas. Mariners should proceed with caution.

SOURCE DIAGRAM

Most of the hydrography identified by the letter "J" was surveyed by the U.S. Army Corps of Engineers prior to 1974. Channels currently maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

AUTHORITIES. Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

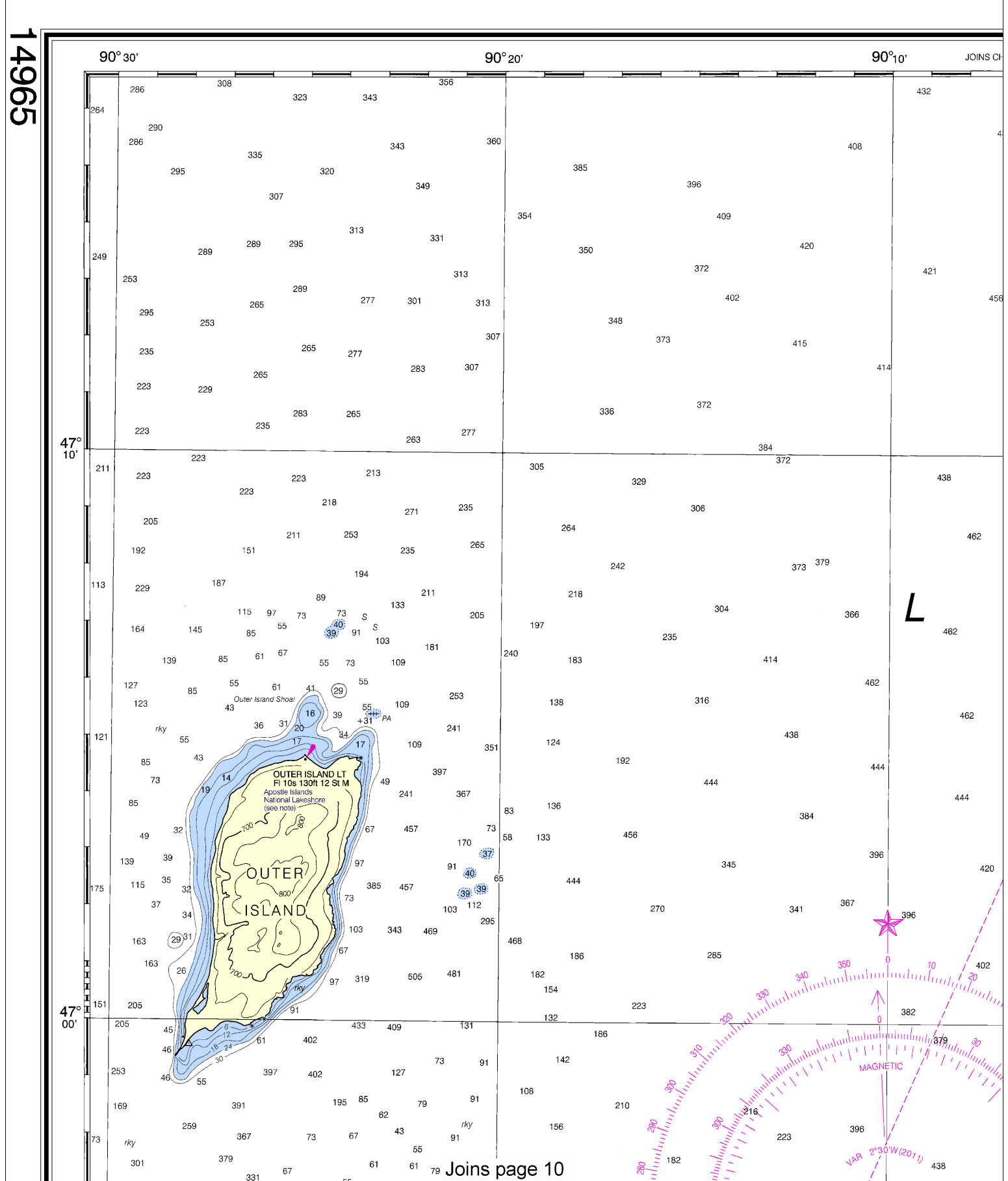
BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.

SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart No. 1

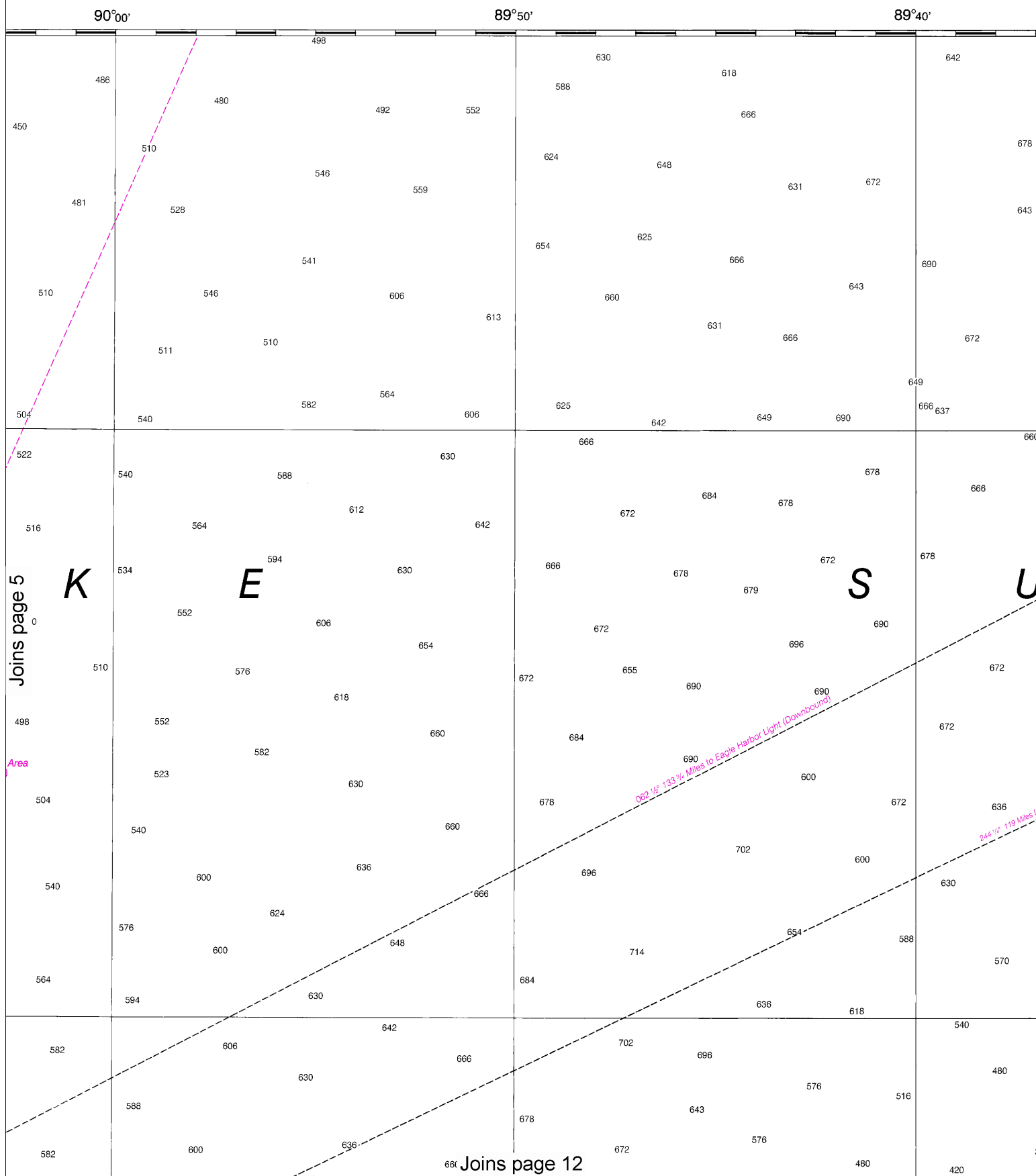
AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.

PLANE OF REFERENCE OF THIS CHART (Low Water Datum).....601.1ft.
Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985)



Note: Chart grid lines are aligned with true north.



6

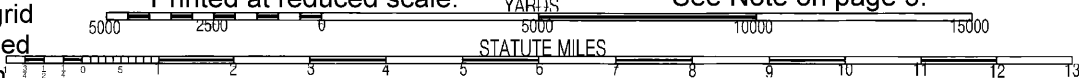
Note: Chart grid lines are aligned with true north.

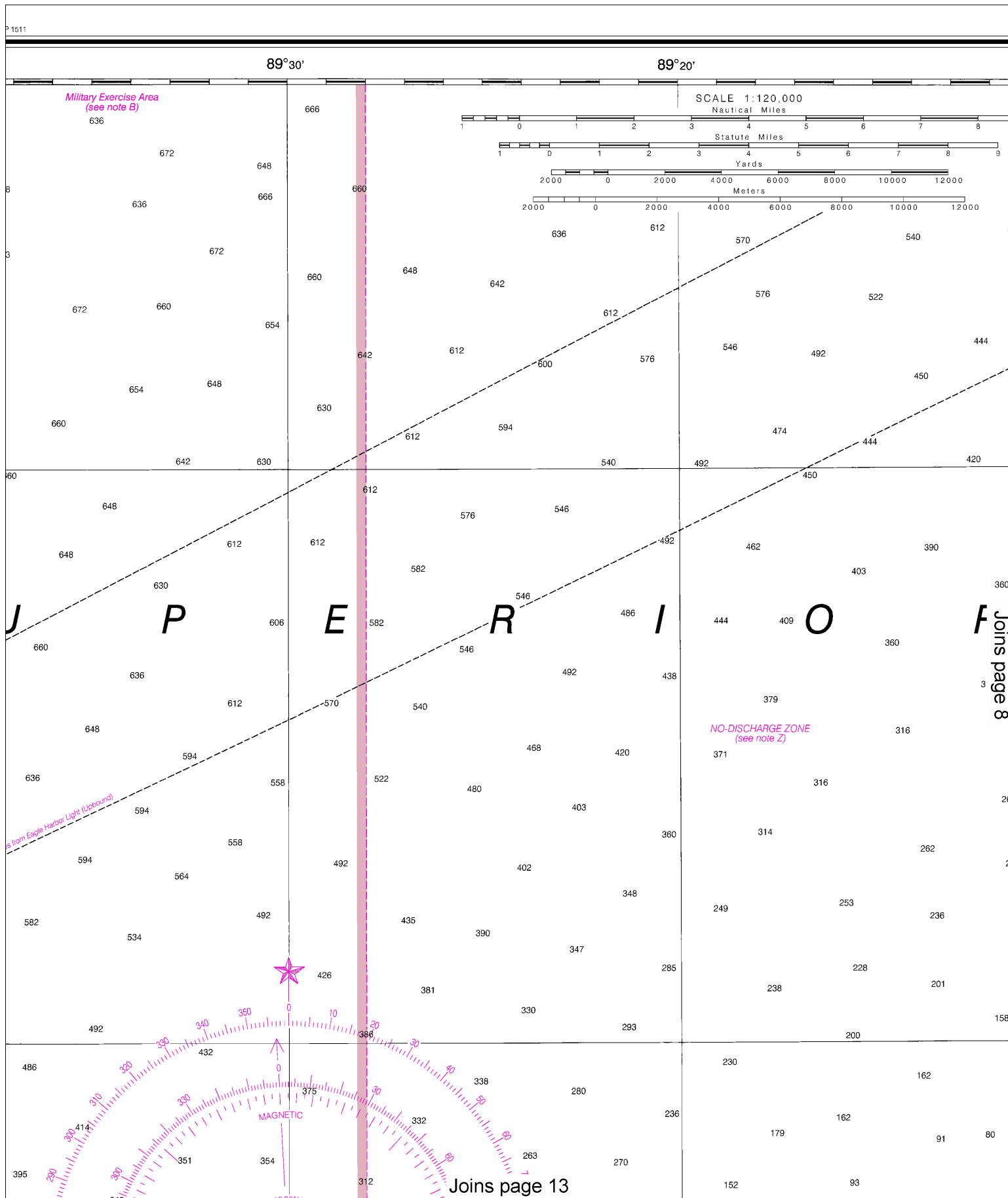
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YARDS

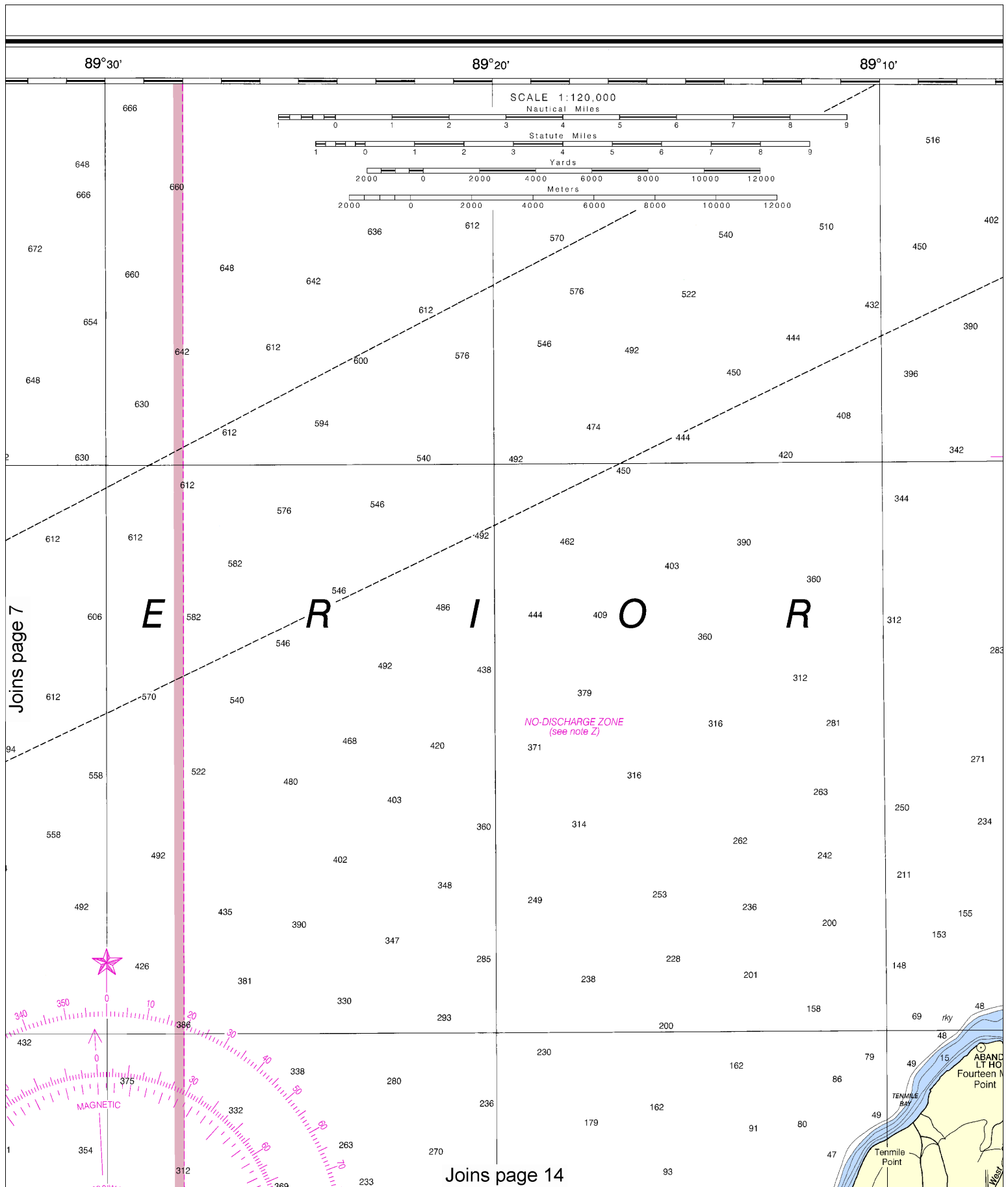
See Note on page 5.

STATUTE MILES





This BookletChart has been updated through: Coast Guard Local Notice To Mariners: 4712 11/20/2012,
 NGA Weekly Notice to Mariners: 4812 12/1/2012,
 Canadian Coast Guard Notice to Mariners: 1012 10/26/2012.

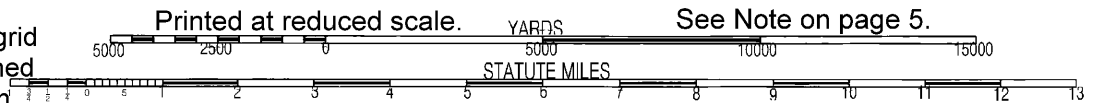


8

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

See Note on page 5.



89°00' 88°50'

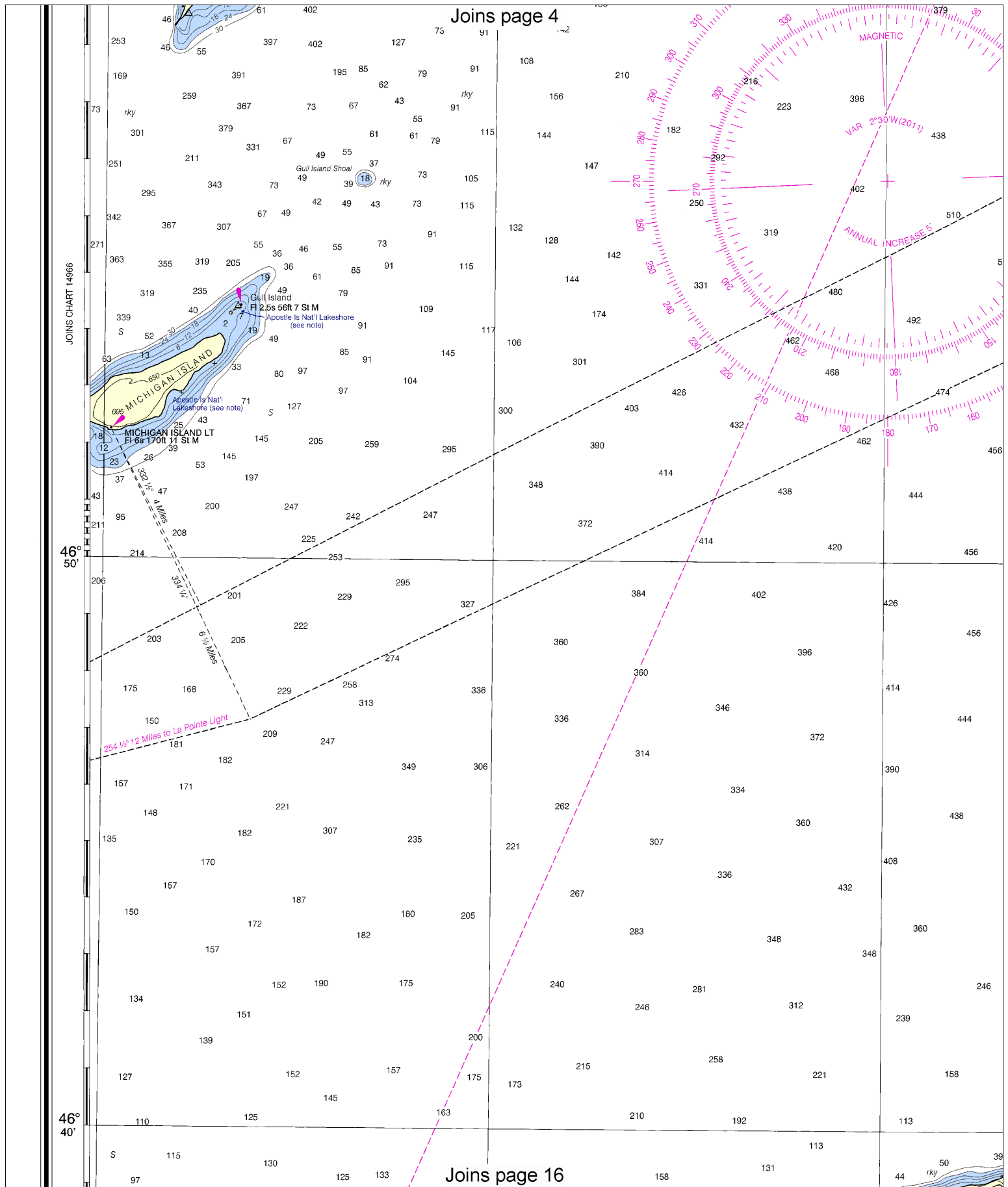
47°10' 47°00'

VAR 3°30'W(2011)
ANNUAL INCREASE 1'

JOINS page 15

JOINS CHART 14964

JOINS CHART 14964

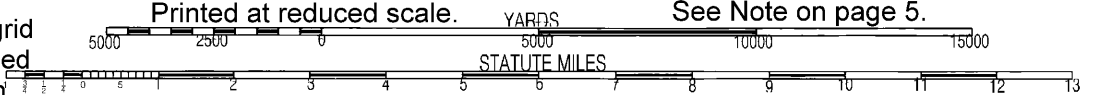


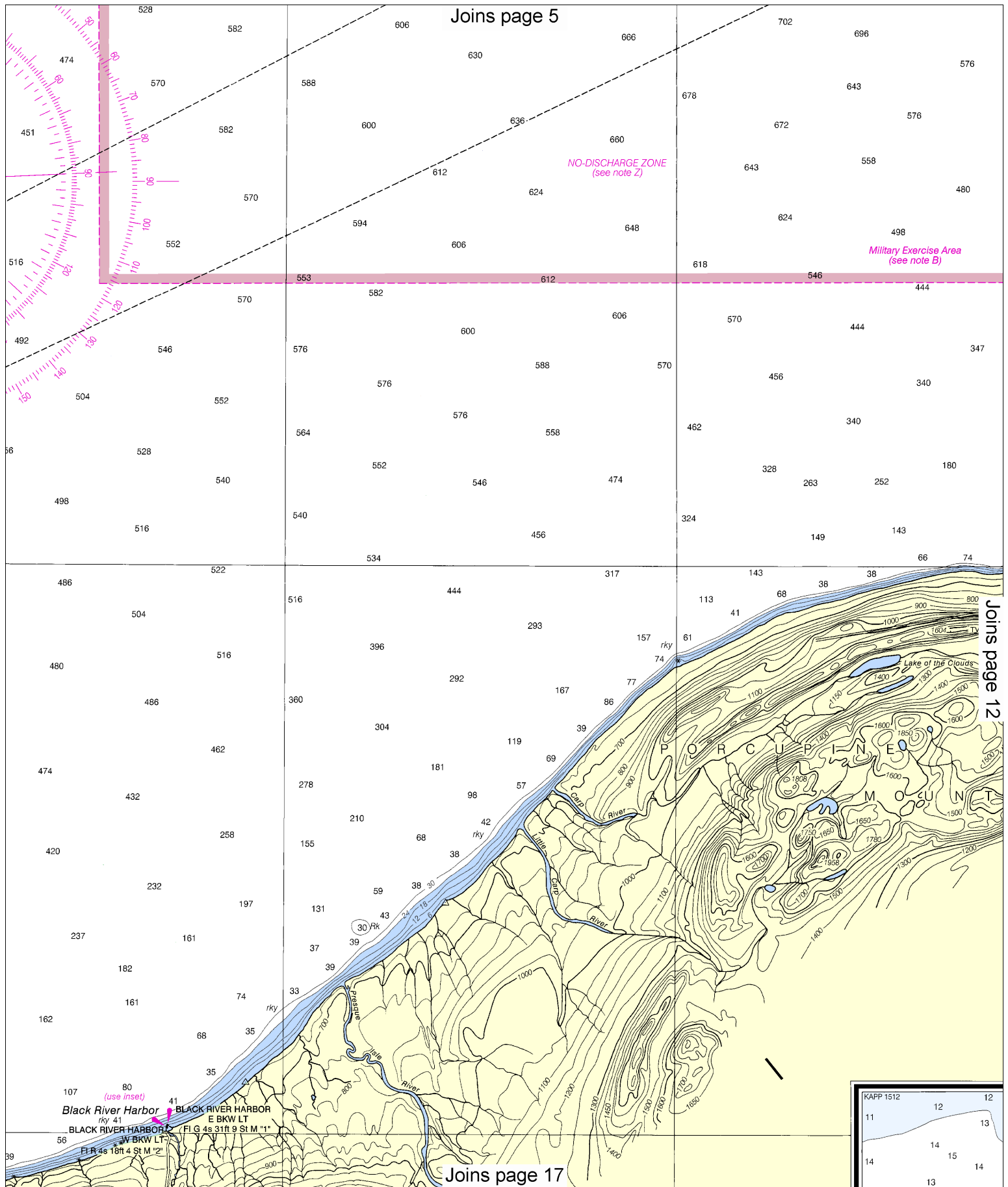
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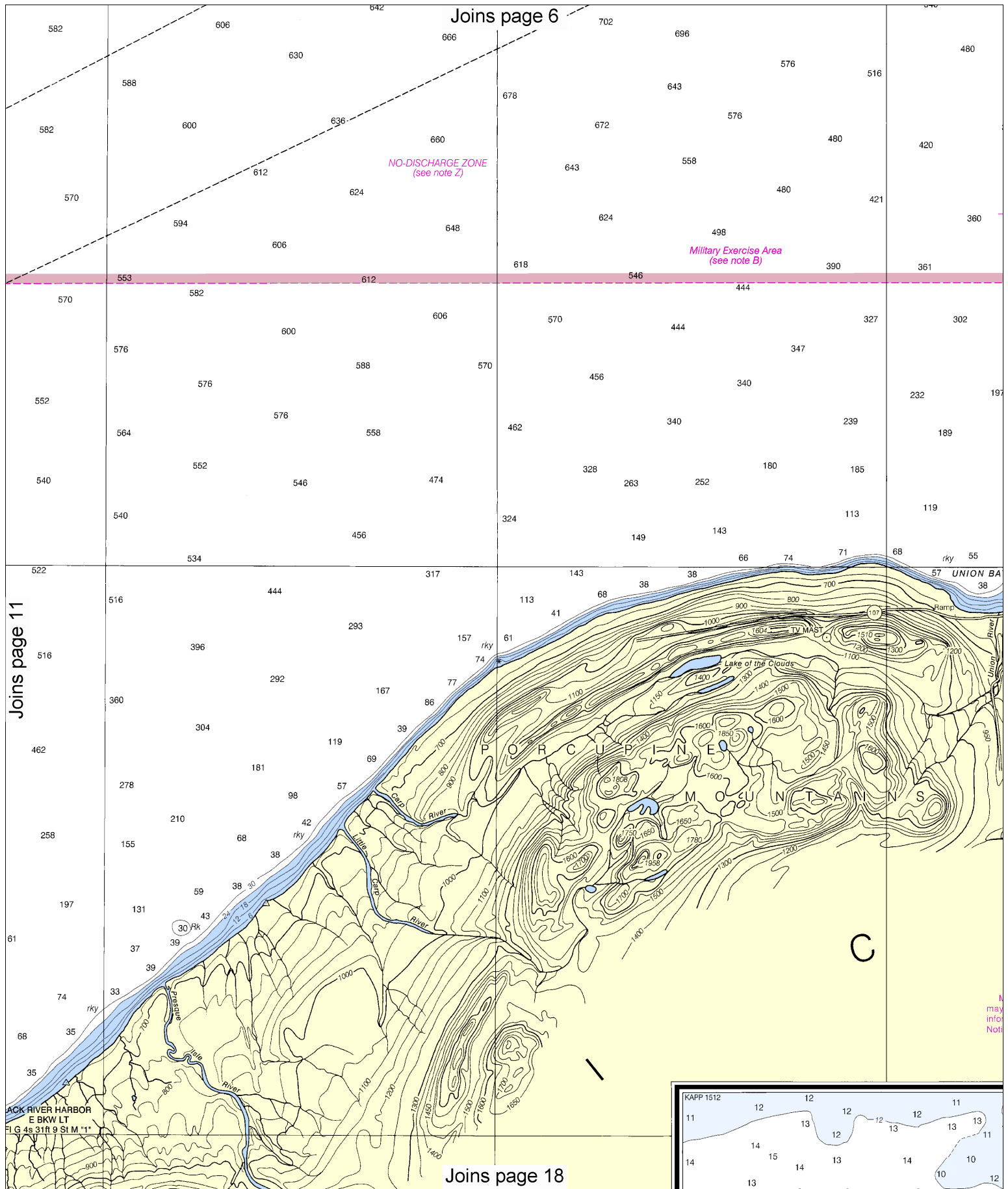
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

See Note on page 5.

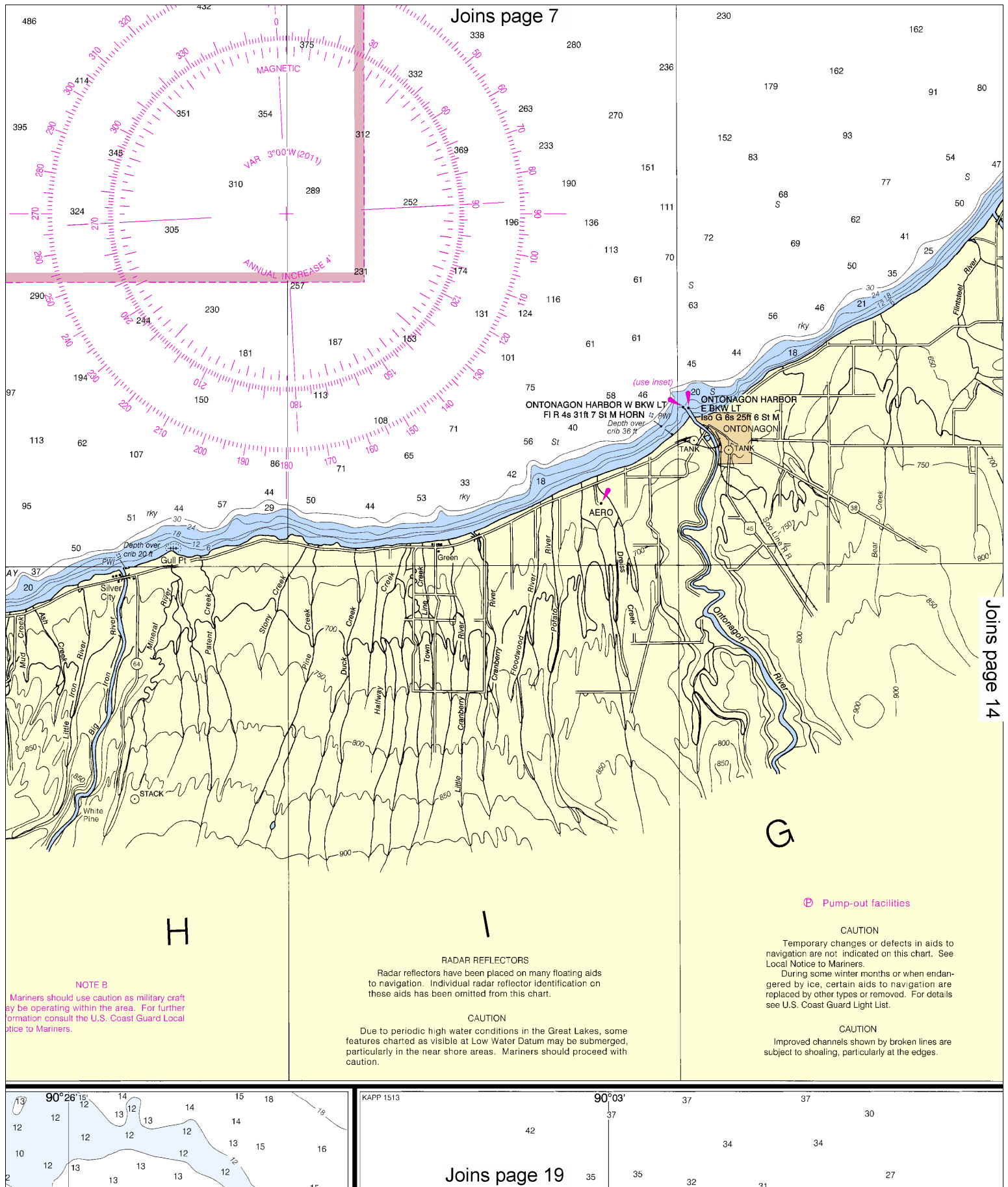


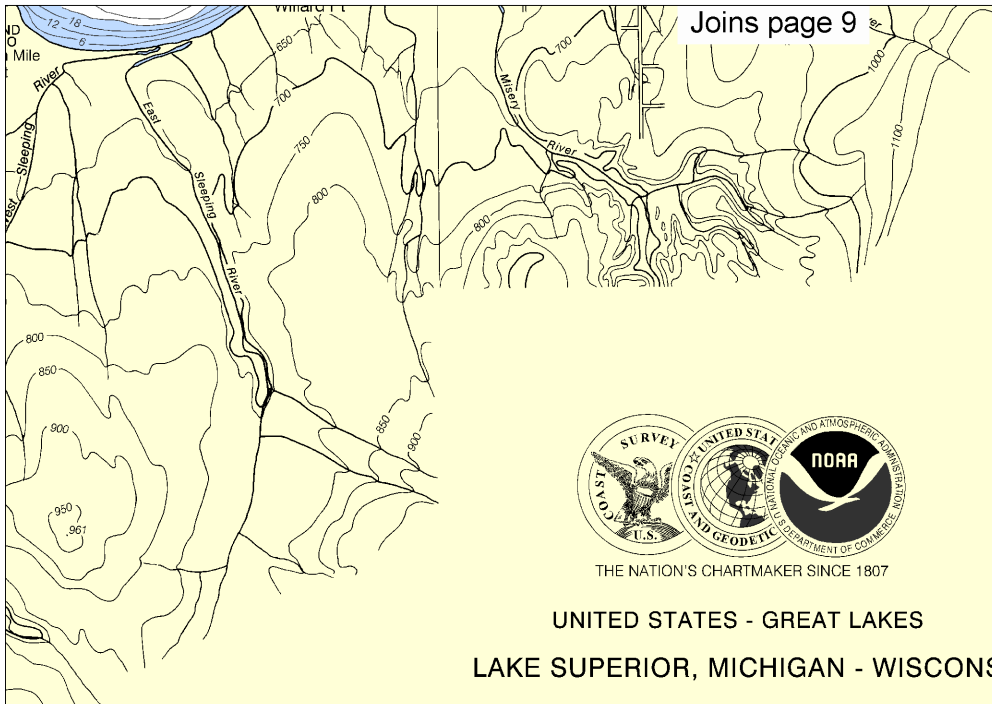




12

Note: Chart grid
lines are aligned
with true north.





UNITED STATES - GREAT LAKES
LAKE SUPERIOR, MICHIGAN - WISCONSIN

REDRIDGE TO SAXON HARBOR

Polyconic Projection
Scale 1:120,000

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET

Additional information can be obtained at nauticalcharts.noaa.gov.

NOTES

PLANE OF REFERENCE OF THIS CHART (Low Water Datum).....601.1ft.
Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).
SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.
AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.
SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart No. 1.
BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.
AUTHORITIES. Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 6 for important supplemental information.

Sailing courses and limits indicated in magenta are recommended by the Lake Carriers Association and the Canadian Shipowners Association.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

HORIZONTAL DATUM

The horizontal reference datum of this chart is the North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Graphic positions referred to the North American Datum of 1927 must be corrected by a shift of 0.198" southward and 0.583" westward with this chart.

NOAA WEATHER RADIO BROADCASTS

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WEX-73 162.400 MHz (WX-2)

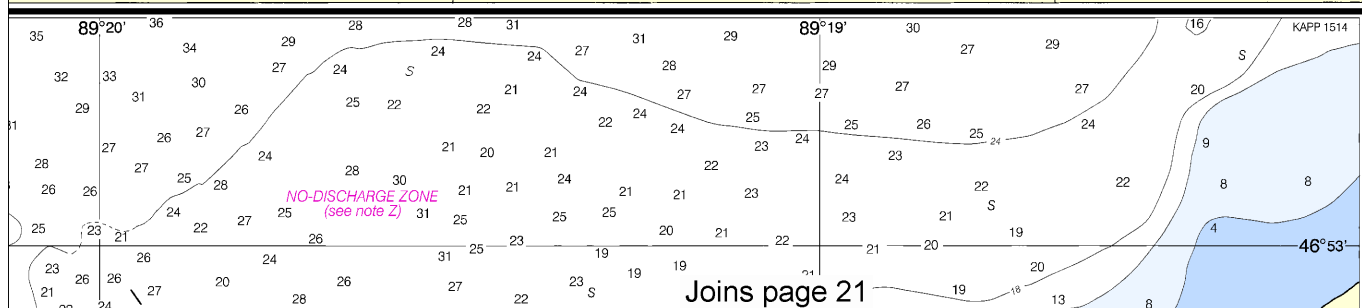
CAUTION

POTABLE WATER INTAKE

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RADAR REFLECTORS

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Joins page 21

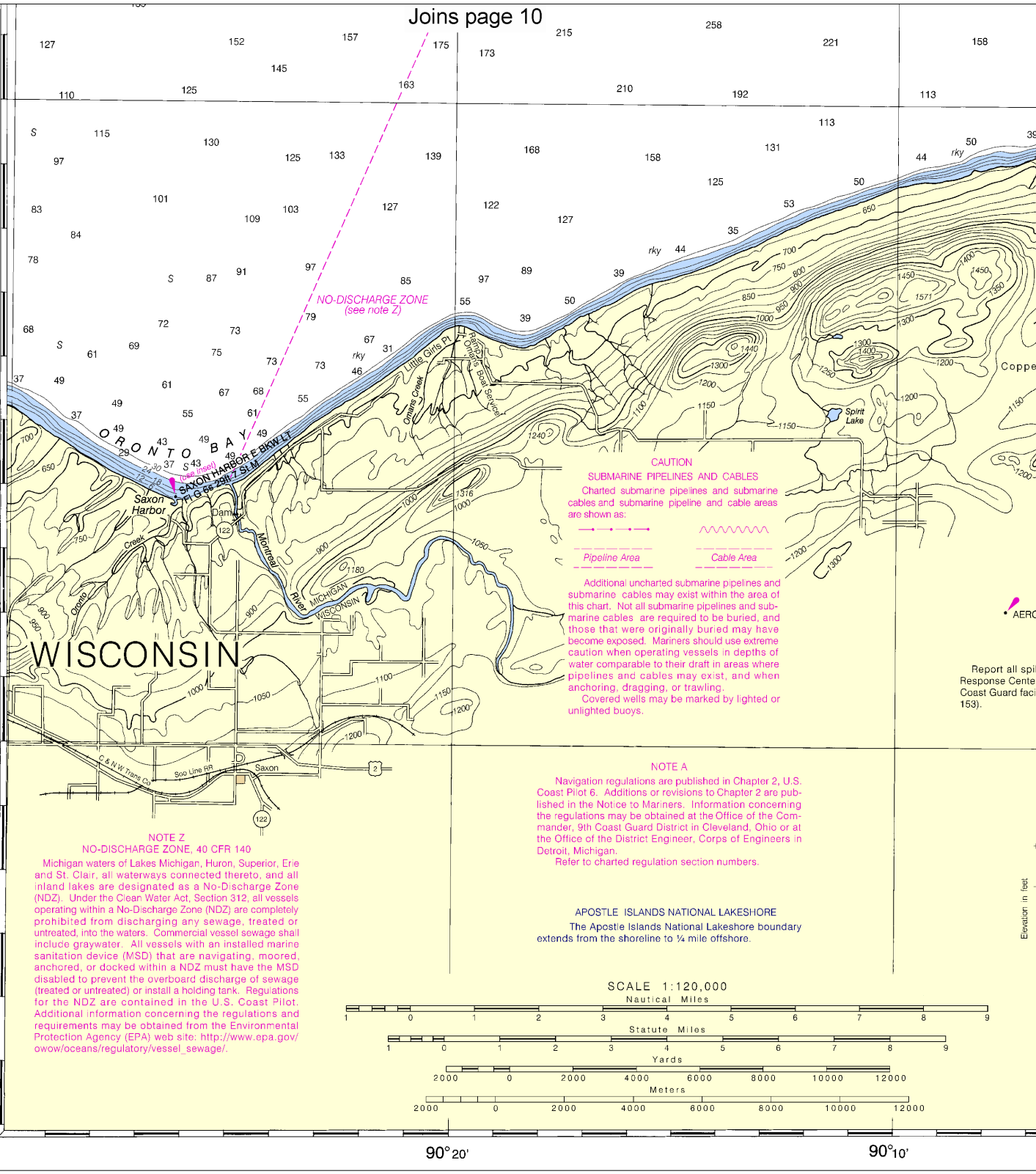
46°
50'

46°
40'

Joins page 10

46°
40'

46°
30'



22nd Ed., Oct. / 11 ■ Corrected through NM Oct. 22/11
Corrected through LNM Oct. 11/11

14965

CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

This nautical chart has been designed to promote safe navigation. Ocean Service encourages users to submit corrections, additions improving this chart to the Chief, Marine Chart Division (N/CS2 Service, NOAA, Silver Spring, Maryland 20910-3282.

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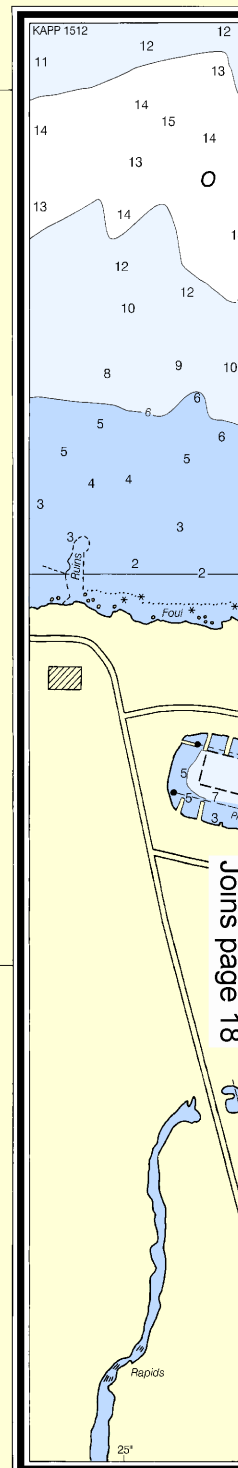
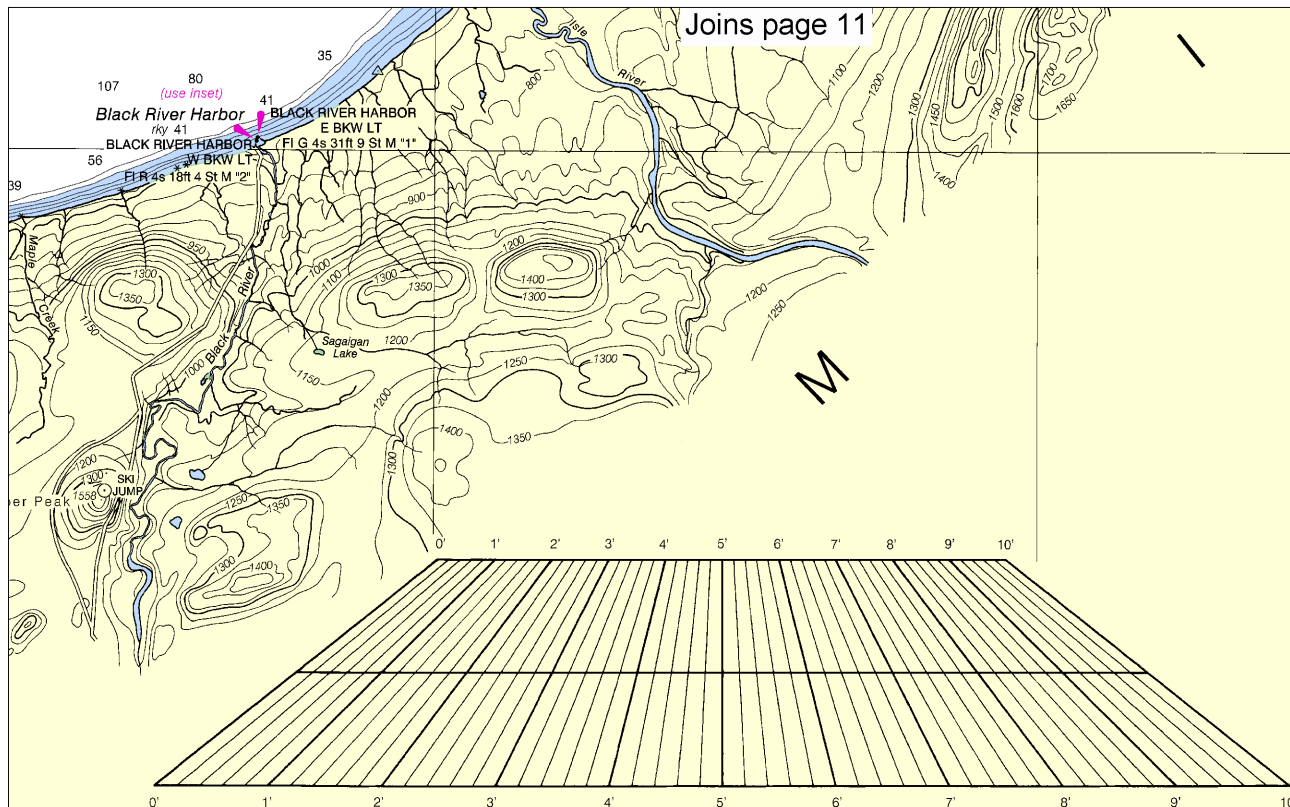
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

YARDS

See Note on page 5.

STATUTE MILES



Joins page 18

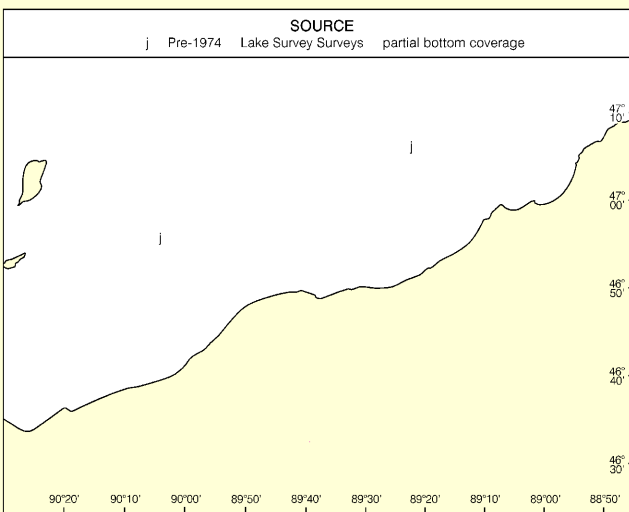
Latitude and Longitude Plotting Interpolator

SOURCE DIAGRAM

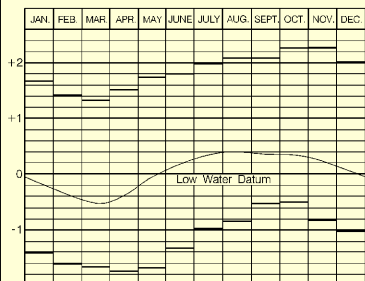
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SOURCE

j Pre-1974 Lake Survey Surveys partial bottom coverage



LAKE SUPERIOR



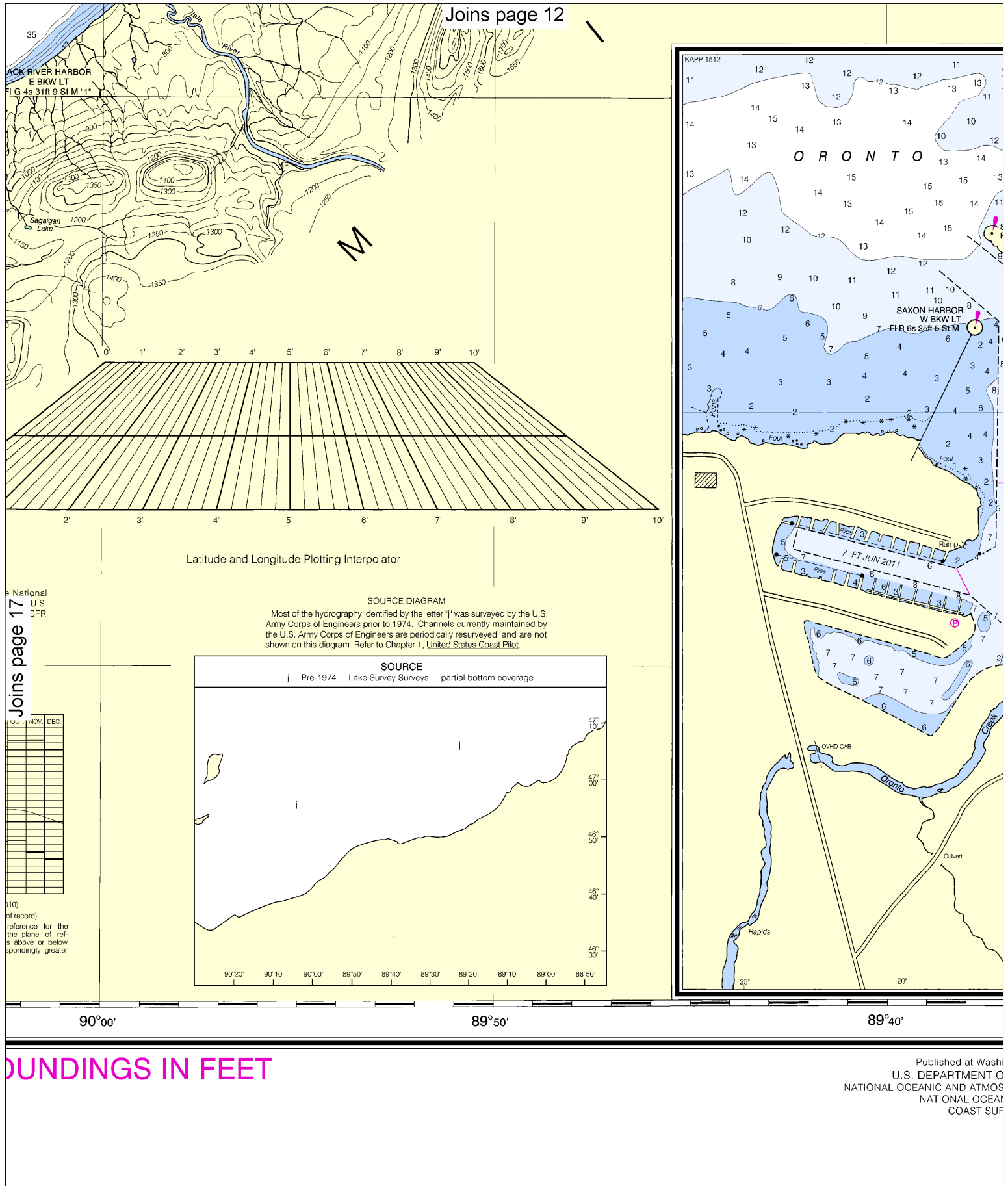
Average Levels (2001-2010)
Extreme Levels (period of record)
Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

90°00'

89°50'

SOUNDINGS IN FEET

igation. The National
ns, or comments for
S2), National Ocean



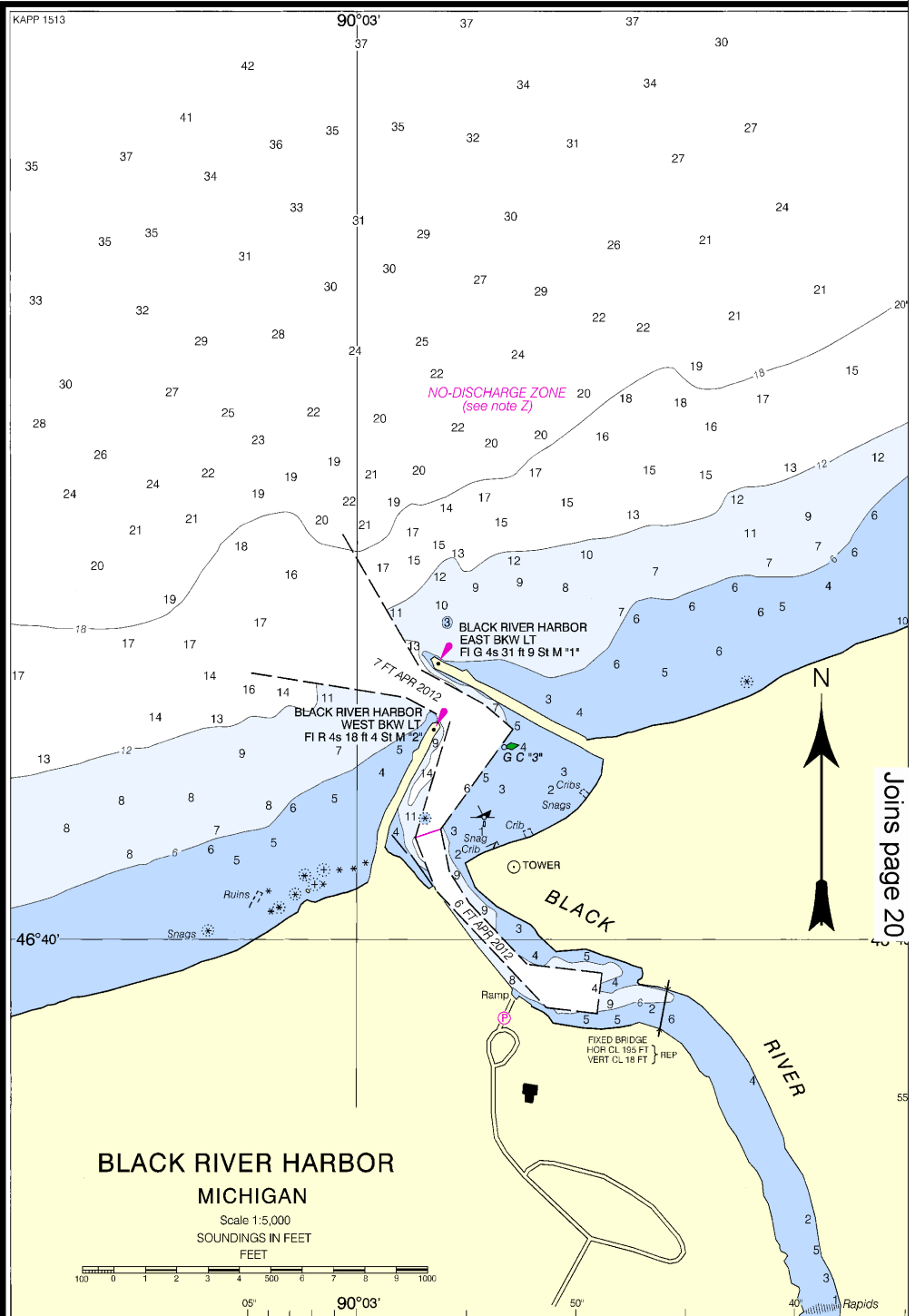
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YARDS

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STATUTE MILES

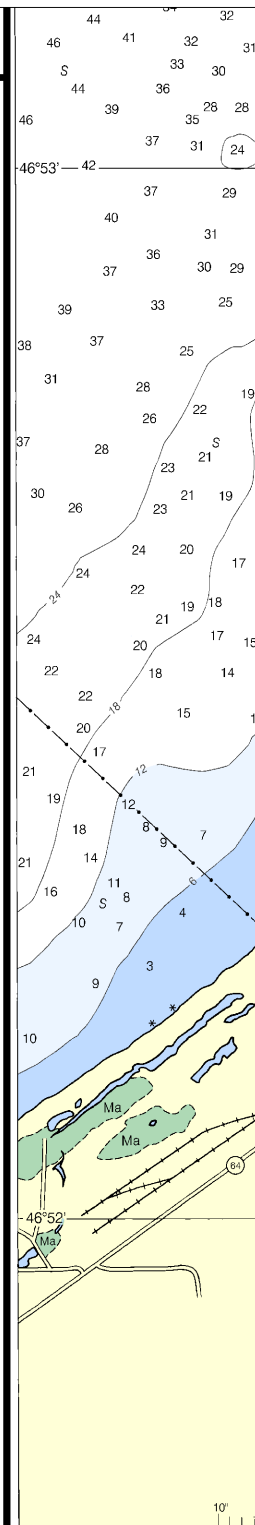
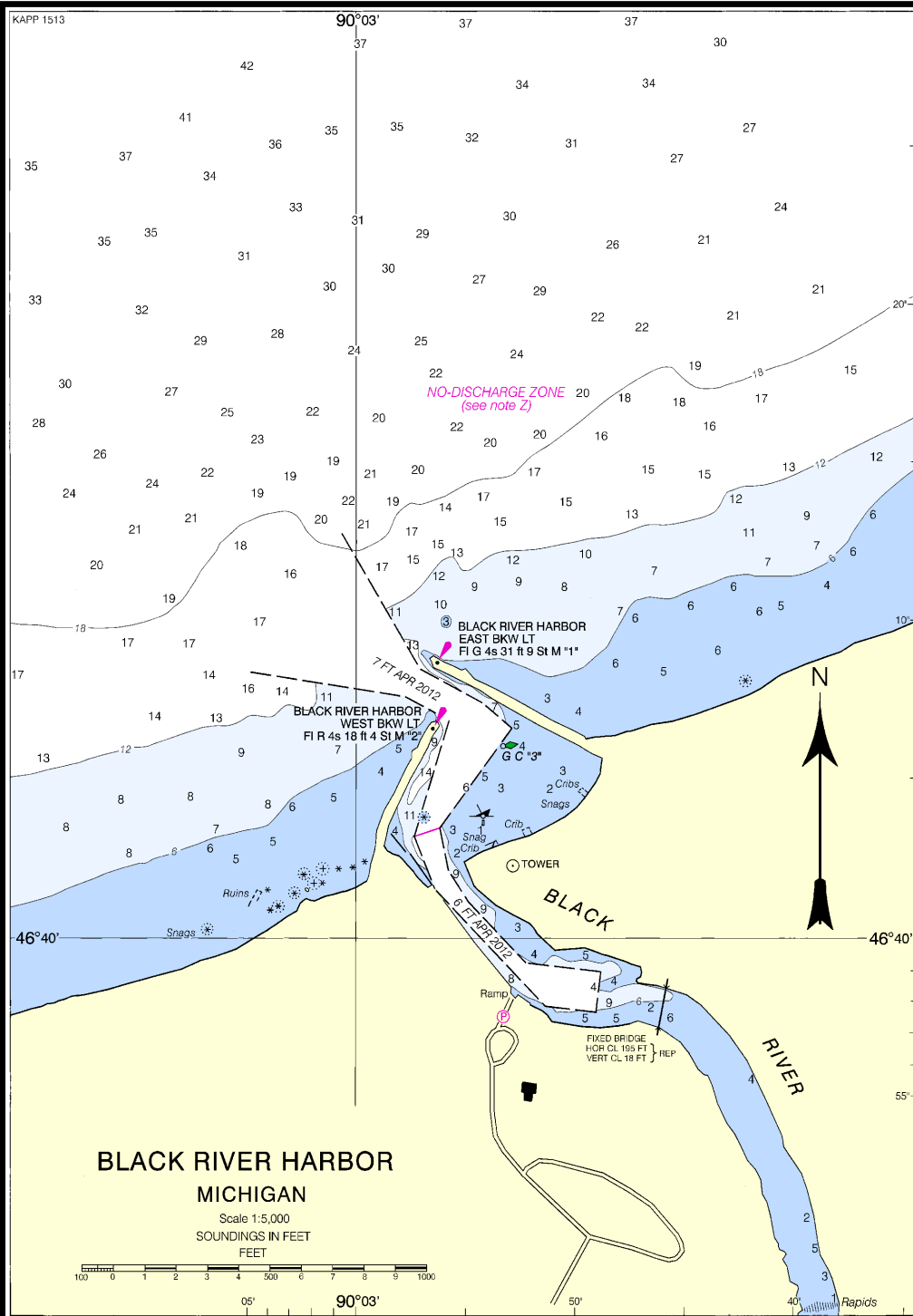
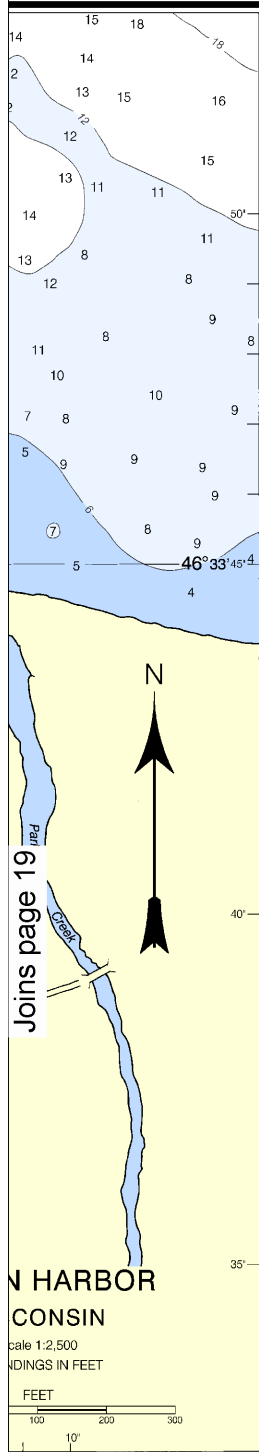


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Features changed as visible at Low Water Datum may be submerged, particularly in the near shore areas. Mariners should proceed with caution.

Joins page 14

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.



PRINT-ON-DEMAND CHARTS

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FATHOMS	1	2	3
FEET	6	12	18
METERS	1	2	3

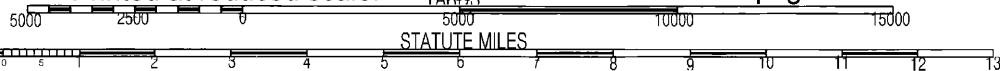
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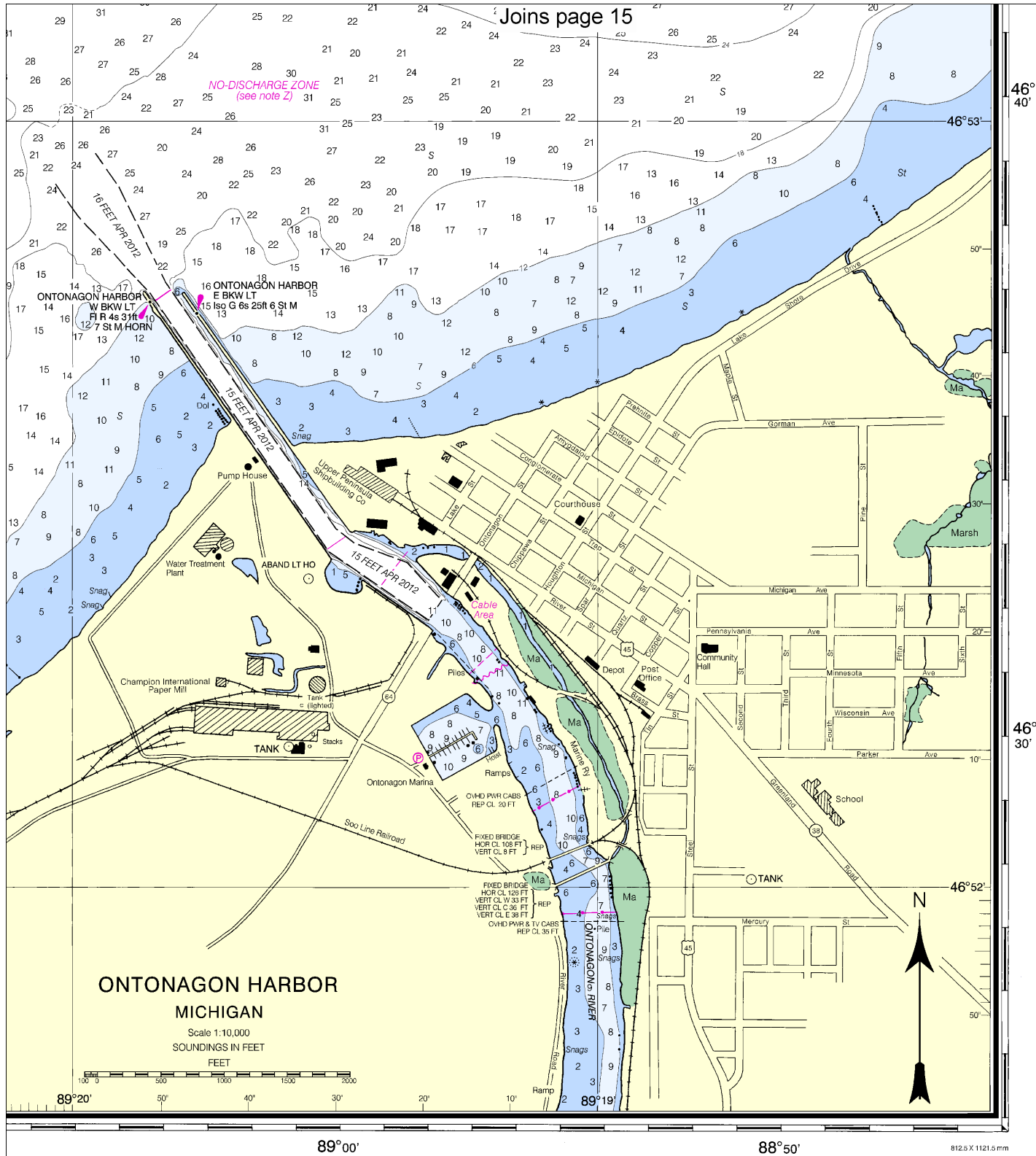
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

YARDS

See Note on page 5.





ED. NO. 22

NSN 7642014010607
NGA REFERENCE NO. 14XCO14965

14965

Redridge to Saxon Harbor
SOUNDINGS IN FEET - SCALE 1:120,000



VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

Quick References

Nautical chart related products and information	—	http://www.nauticalcharts.noaa.gov
Online chart viewer	—	http://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html
Report a chart discrepancy	—	http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx
Chart and chart related inquiries and comments	—	http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs
Chart updates (LNM and NM corrections)	—	http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
Coast Pilot online	—	http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm
Tides and Currents	—	http://tidesandcurrents.noaa.gov
Marine Forecasts	—	http://www.nws.noaa.gov/om/marine/home.htm
National Data Buoy Center	—	http://www.ndbc.noaa.gov/
NowCoast web portal for coastal conditions	—	http://www.nowcoast.noaa.gov/
National Weather Service	—	http://www.weather.gov/
National Hurricane Center	—	http://www.nhc.noaa.gov/
Pacific Tsunami Warning Center	—	http://ptwc.weather.gov/
Contact Us	—	http://www.nauticalcharts.noaa.gov/staff/contact.htm



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